



The State of Drupal 9

presented by @amberhimesmatz from @drupalizeme

Most slides by @gaborhojtsy at @acquia, a few by
@amberhimesmatz at @drupalizeme

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Hello!

I'm [Amber Himes Matz](#).

I know a few things about
Drupal 9 and want to share
them with you.

On Twitter:
[@amberhimesmatz](#)



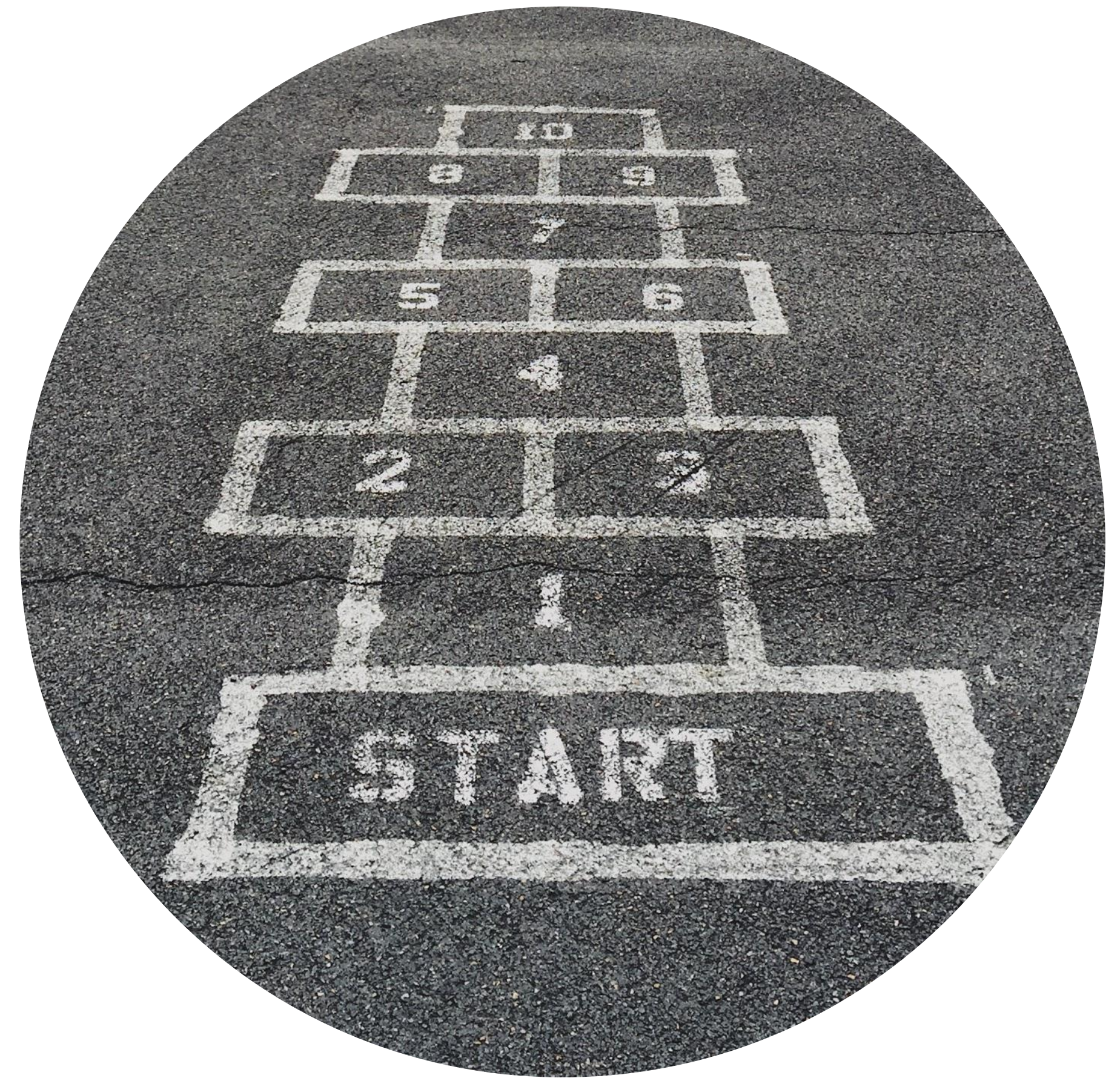


INNOVATION IN DRUPAL

1

Semantic versioning

Allows to release feature updates in minor releases (8.1, 8.2, etc) with backward compatibility.



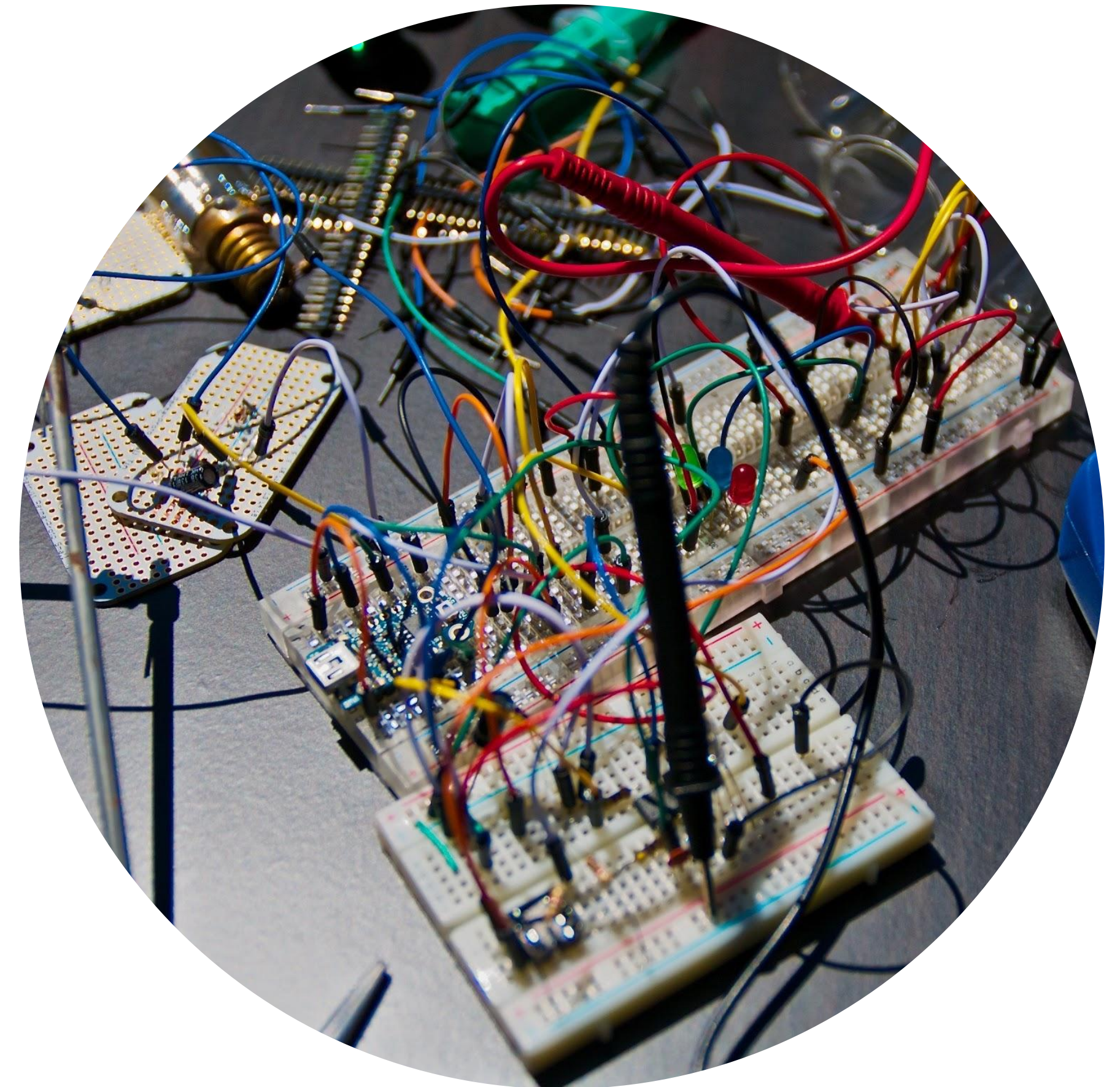
Scheduled releases

Minor releases every six months make versions predictable. New features introduced at a regular pace.



Experimental modules

When features need more time and feedback to be finalized, they are added as experimental modules. Backward compatibility is still supported.



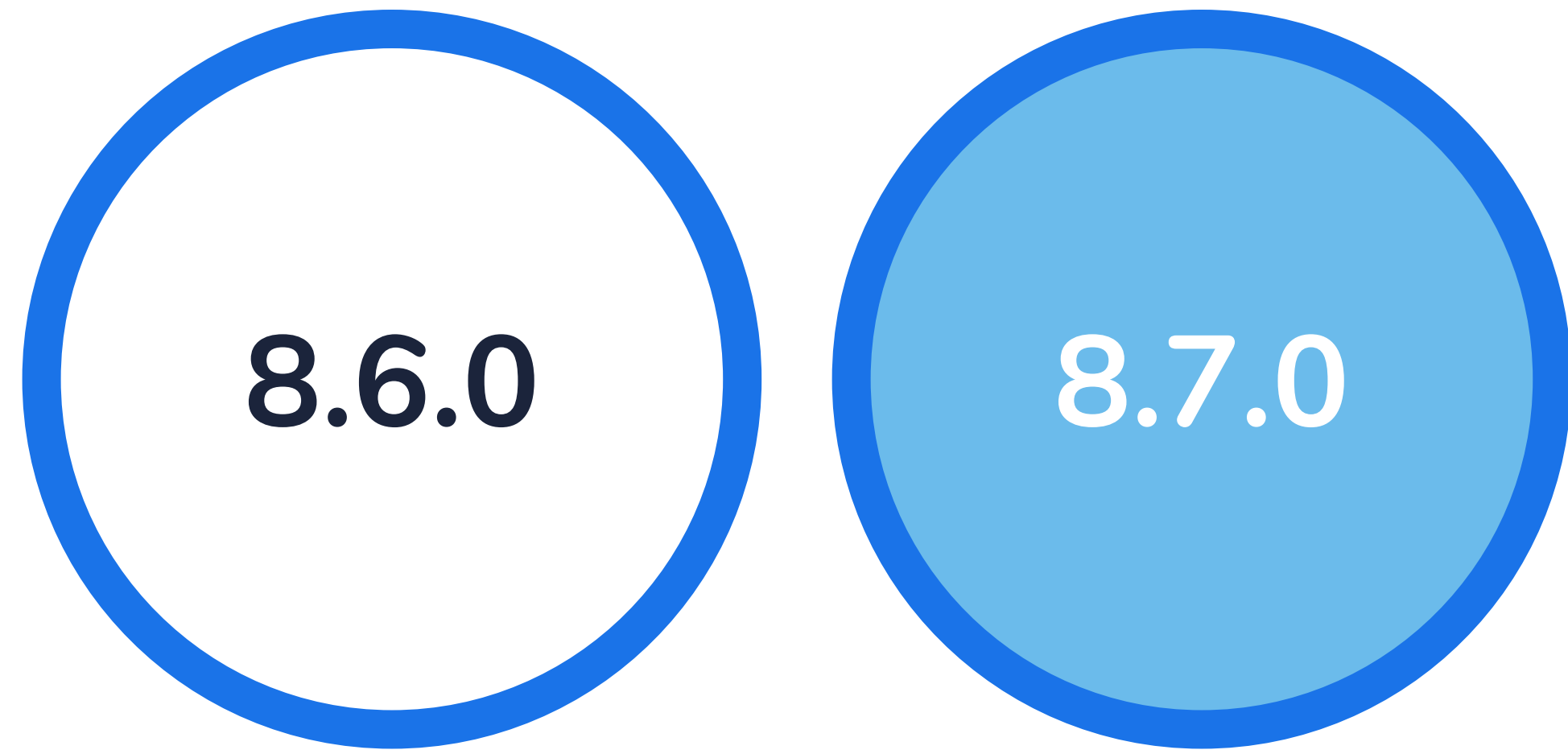


8.6.0

Experimental: Media Library, Workspaces

Stable: Demo, Monolingual migrations



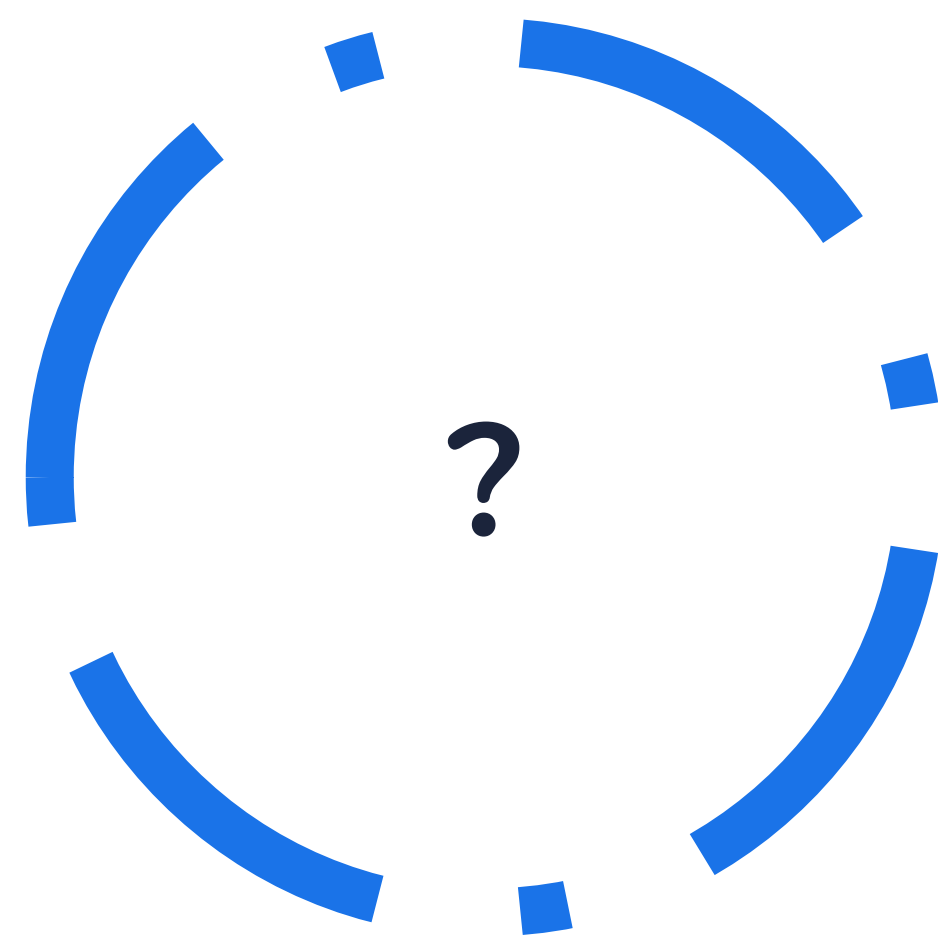


Experimental: Hugely improved Media Library

Stable: Layout Builder, JSON:API

Third party: Optional Twig 2 support*







WHY
DRUPAL 9?

2

1

Update
third-party
dependencies

2

Clean up
our own
codebase



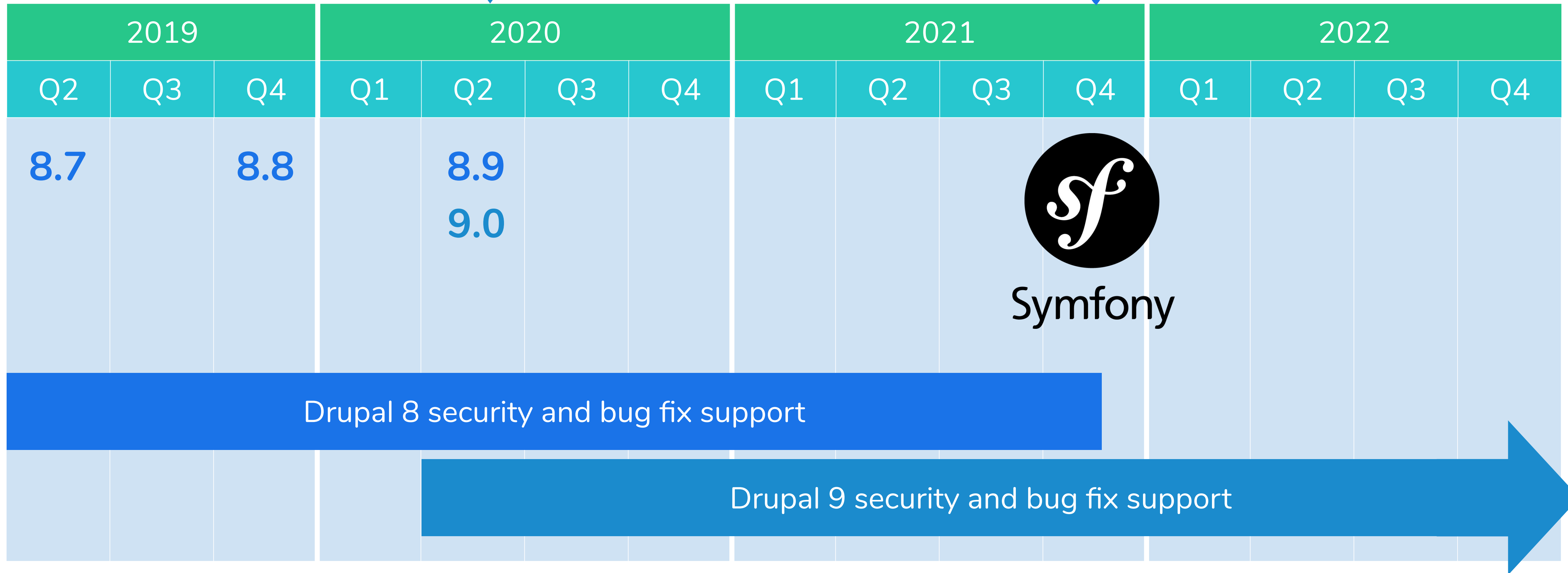
Third-Party Dependencies



drupal.org/core/dependencies

First Drupal 9 release

Drupal 8 end of life







Drupal 10 release
estimated
middle of 2022

Drupal 9 end of life
estimated end of 2023

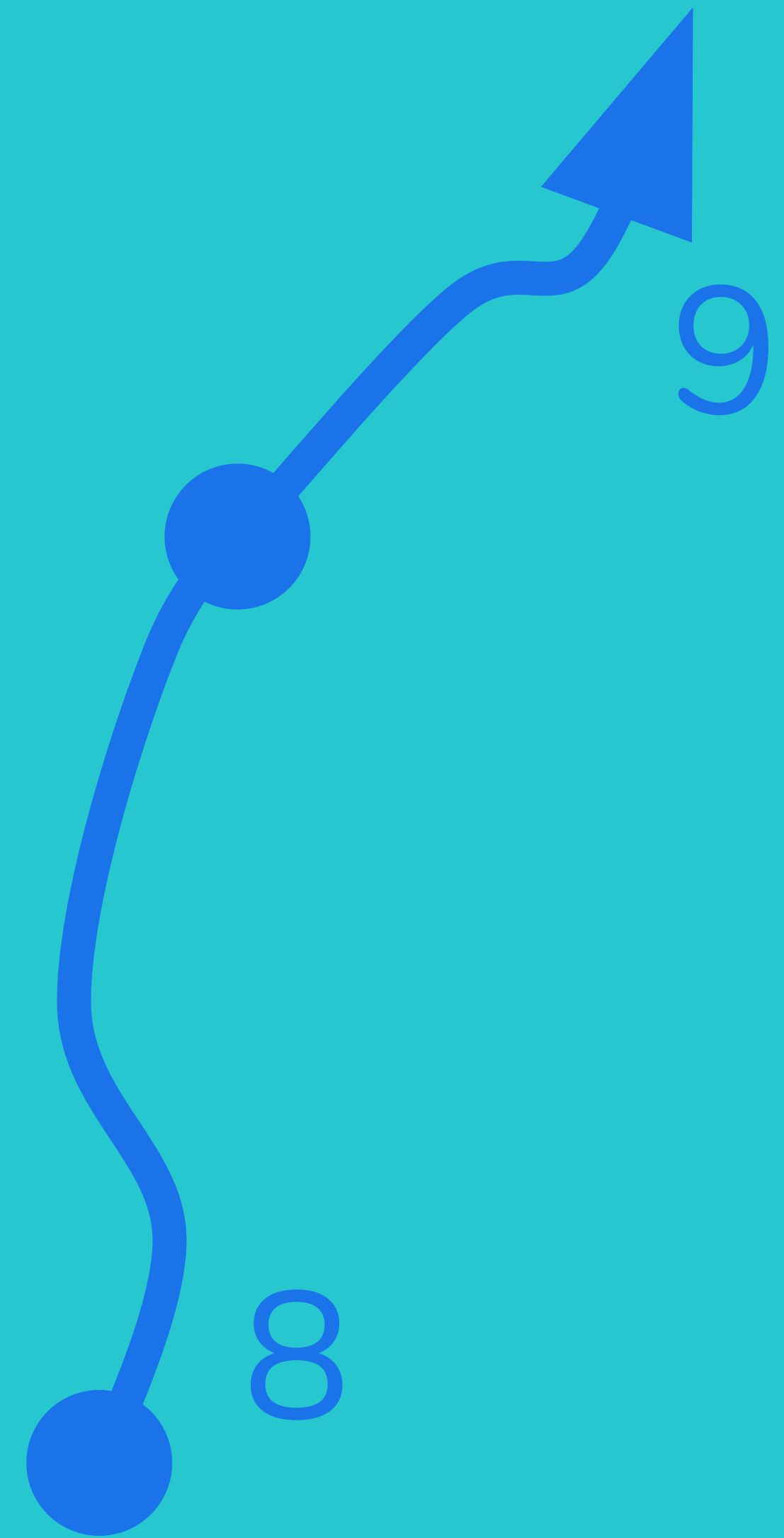


THE MAKING OF DRUPAL 9 3

Major versions
were brand new
codebases in the
past



Now major
versions are
derived from the
previous major

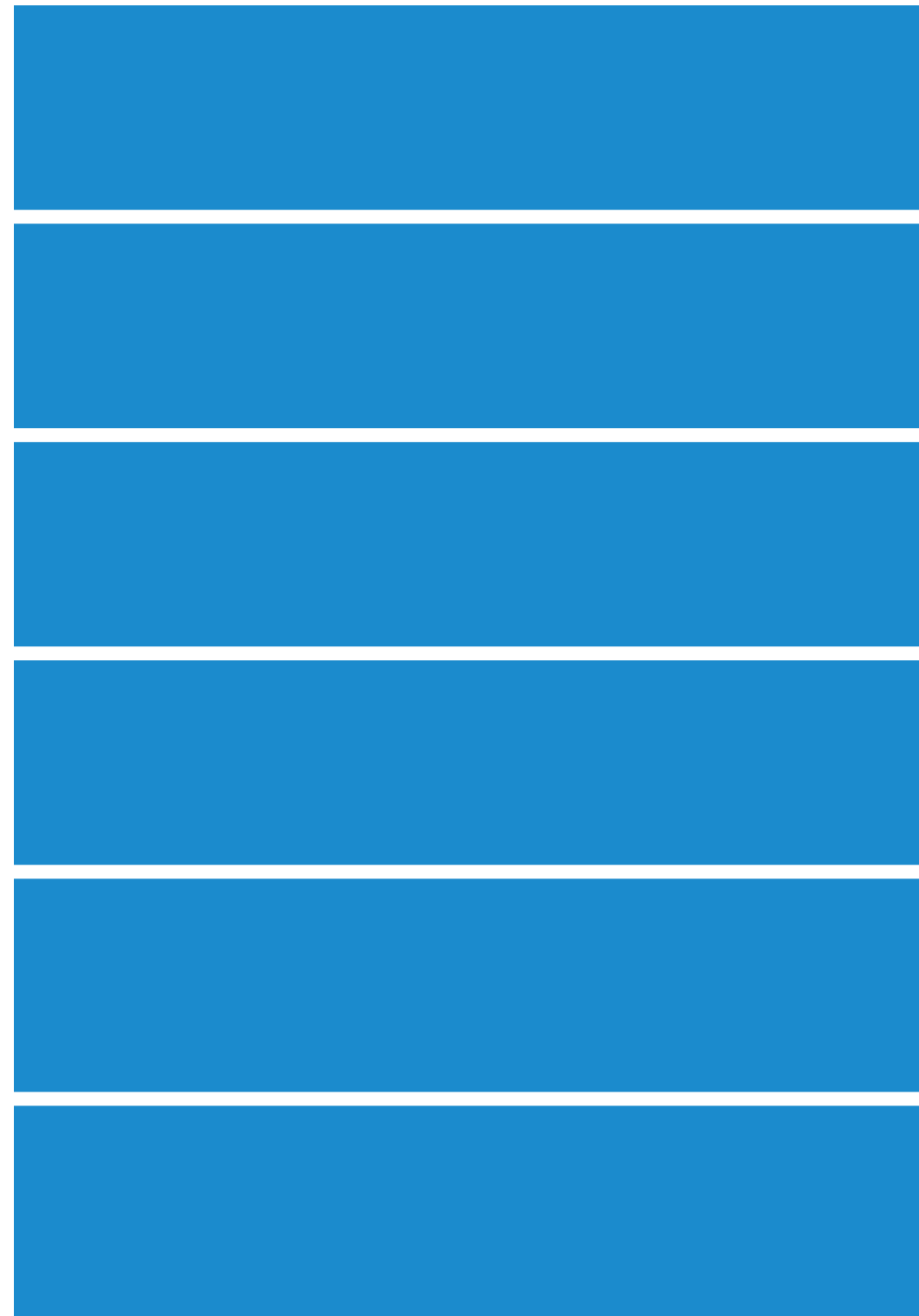


Deprecation processes

Backward compatible APIs are kept while future changes are indicated so API consumers can prepare for the change to Drupal 9.



8.7 API



8.7 API

New solution



8.7 API

New solution

Deprecated



8.7 API

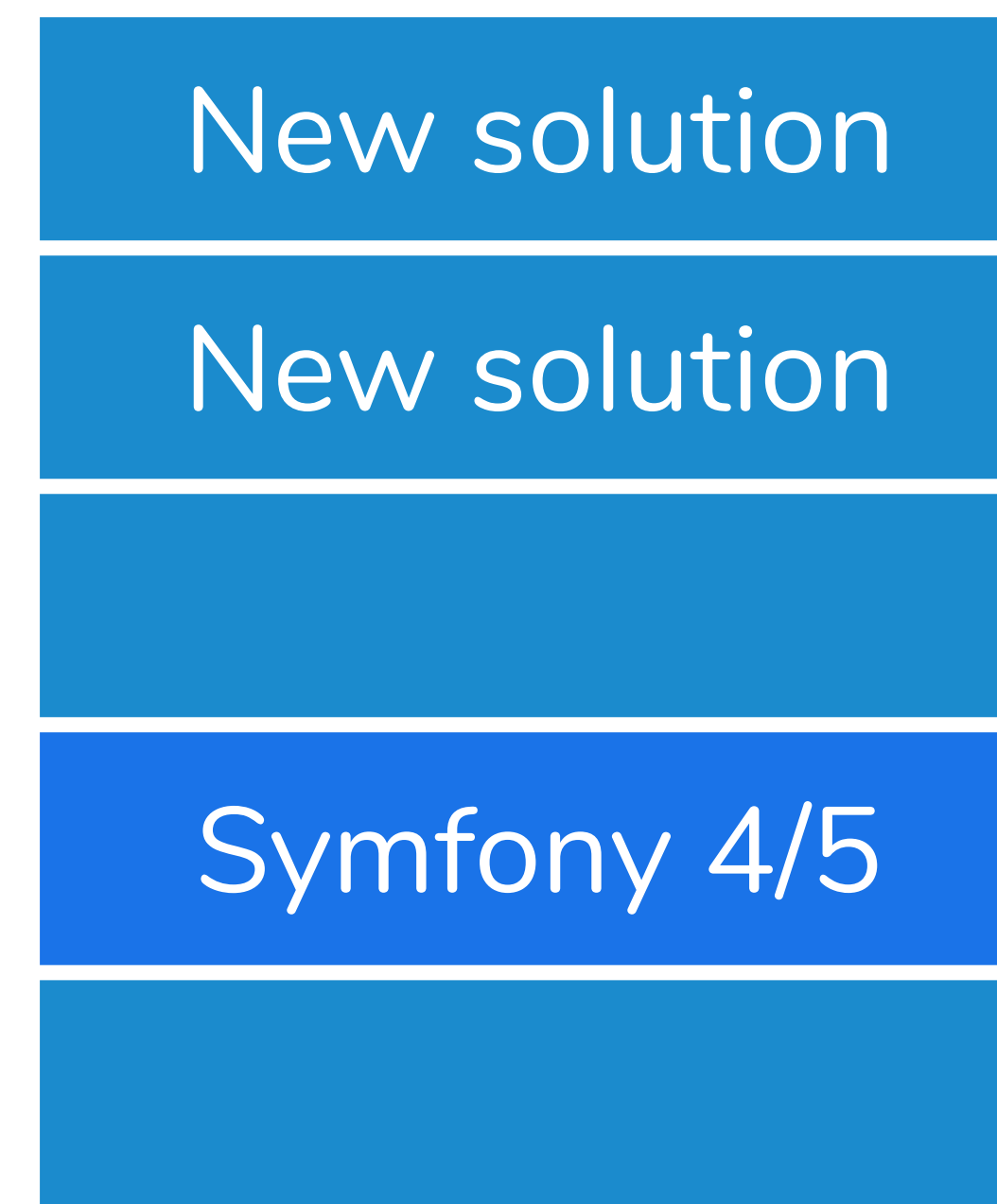


...

8.9 API



9.0 API



Drupal 9.0 API =
Drupal 8.9 API minus
deprecated parts
plus third party
dependencies
updated

8.9 API

New solution
New solution
Deprecated
Deprecated
Symfony 3

9.0 API

New solution
New solution
Symfony 4/5

Drupal 8 modules **not**
using deprecated
APIs will continue to
work on Drupal 9.

8.9 API



9.0 API



We are building
Drupal 9 in
Drupal 8
step-by-step.





PREPARING FOR DRUPAL 9

4

Keep Drupal core and
contributed projects up-to-date.





```
// Before  
file_unmanaged_copy($source, $destination);  
  
// After  
\Drupal::service('file_system')->copy($source, $destination);
```

Use this with actual
dependency
injection to get the
benefits.



```
/**
 * Copies a file to a new location without database changes or hook invocation.
 *
 * [...]
 *
 * @deprecated in Drupal 8.7.0, will be removed before Drupal 9.0.0.
 *   Use \Drupal\Core\File\FileSystemInterface::copy().
 *
 * @see https://www.drupal.org/node/3006851
 */
function file_unmanaged_copy($source, $destination = NULL, $replace = FILE_EXISTS_RENAME)
{
    @trigger_error('file_unmanaged_copy() is deprecated in Drupal 8.7.0 and will be removed
before Drupal 9.0.0. Use \Drupal\Core\File\FileSystemInterface::copy(). See
https://www.drupal.org/node/3006851.', E_USER_DEPRECATED);

    // [Backwards compatible implementation]
}
```


drupal> curl -0 -L https://github.com/mglaman/drupal-check/releases/latest/download/drupal-check.phar

% Total	% Received	% Xferd	Average Speed	Time	Time	Time	Current	
			Dload	Upload	Total	Spent	Left	Speed
100	148	0	148	0	406	0	--:--:--	405
100	608	0	608	0	1046	0	--:--:--	1046
100	10.0M	100	10.0M	0	3662k	0	0:00:02	6427k

drupal>

<https://github.com/mglaman/drupal-check>

Line src/Tests/PathTestBase.php

17 Class Drupal\path\Tests\PathTestBase extends deprecated class
Drupal\simpletest\WebTestBase:
in Drupal 8.8.0 and will be removed before Drupal 9.0.0. Instead,
use \Drupal\Tests\BrowserTestBase. See
<https://www.drupal.org/node/3030340>.


Line tests/src/Kernel/Migrate/d6/MigrateUrlAliasTest.php

78 Call to deprecated method lookupDestinationId() of class
Drupal\migrate\Plugin\MigrateIdMapInterface:
in Drupal 8.1.x, will be removed before Drupal 9.0.x. Use
lookupDestinationIds() instead.

[ERROR] Found 5 errors

drupal> █

<https://github.com/mglaman/drupal-check>

<input type="checkbox"/> PROJECT	STATUS
<input type="checkbox"/> Example.com Form Tools	 Not scanned

▼ CONTRIBUTED MODULES AND THEMES








Contributed code is available from drupal.org. Problems here may be partially resolved by updating to the latest version. [Read more about how to update contributed projects.](#)

**6 ERRORS**
Found in 3 projects.

**6 WARNINGS**
Found in 2 projects.

**2 CHECKED**
No known errors found.

**2 NOT SCANNED**
Scan to find errors.





<input type="checkbox"/> PROJECT	AVAILABLE UPDATE	STATUS
<input type="checkbox"/> CDN 8.x-3.3 CDN 8.x-3.3 has no remaining deprecation errors, is as ready as possible for Drupal 9!	Up to date	 No known errors
<input type="checkbox"/> Chaos Tools 8.x-3.0	8.x-3.2	 4 errors, 2 warnings
<input type="checkbox"/> Git Deploy 8.x-2.0-alpha1	Up to date	 No known errors
<input type="checkbox"/> Pathauto 8.x-1.4	Up to date	 1 error
<input type="checkbox"/> Redirect 8.x-1.3	8.x-1.4	 Not scanned
<input type="checkbox"/> 1.5	Up to date	 Not scanned
<input type="checkbox"/> alpha5+3-dev		

Upgrade Status 8.x-1.0-beta1



1 error found. 4 warnings found. Items categorized "Fix now" are uses of deprecated APIs from community unsupported core versions.

See [#3056118: Keep Upgrade Status itself Drupal 9 compatible other than testing code](#)

STATUS	FILE NAME	LINE	ERROR
 Fix later	modules/contrib/upgrade_status/src/ DeprecationAnalyser.php	364	Call to deprecated function file_prepare_directory() . Deprecated in Drupal 8.7.0, will be removed before Drupal 9.0.0. Use <code>\Drupal\Core\File\FileSystemInterface::prepareDirectory()</code> .
 Fix later	modules/contrib/upgrade_status/src/ DeprecationAnalyser.php	372	Call to deprecated function file_prepare_directory() . Deprecated in Drupal 8.7.0, will be removed before Drupal 9.0.0. Use <code>\Drupal\Core\File\FileSystemInterface::prepareDirectory()</code> .
 Fix now	modules/contrib/upgrade_status/tests/modules/ upgrade_status_test_contrib_error/src/Controller/ UpgradeStatusTestContribErrorController.php	15	Call to deprecated function format_string() . Deprecated in Drupal 8.0.0, will be removed before Drupal 9.0.0. Use <code>\Drupal\Component\Render\FormattableMarkup</code> .
 Check manually	modules/contrib/upgrade_status/tests/modules/ upgrade_status_test_error/fatal.php	3	Syntax error, unexpected T_STRING on line 3
	modules/contrib/upgrade_status/tests/modules/ upgrade_status_test_error/src/Controller/ UpgradeStatusTestErrorController.php	10	Call to deprecated function menu_cache_clear_all() . Deprecated in Drupal 8.6.0, will be removed before Drupal 9.0.0. Use <code>\Drupal\Core\Menu\MenuCache->invalidateAll()</code> instead.

Upgrade Status

https://drupal.org/project/upgrade_status

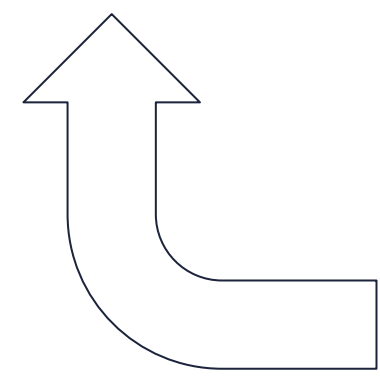


Test on drupal.org with drupalci.yml snippet

```
build:
  assessment:
    validate_codebase:
      # Static analysis of code for @deprecated uses.
    phpstan:
      halt-on-fail: false
  testing:
    run_tests.standard:
      types: 'Simpletest,PHPUnit-Unit,PHPUnit-Kernel,PHPUnit
      # Fails on trigger_error() calls encountered.
      suppress-deprecations: false
```

Customizing DrupalCI Testing for Projects

[https://www.drupal.org/drupalorg/docs/drupal-ci/
customizing-drupalci-testing-for-projects](https://www.drupal.org/drupalorg/docs/drupal-ci/customizing-drupalci-testing-for-projects)



<http://bit.ly/custom-drupalci>

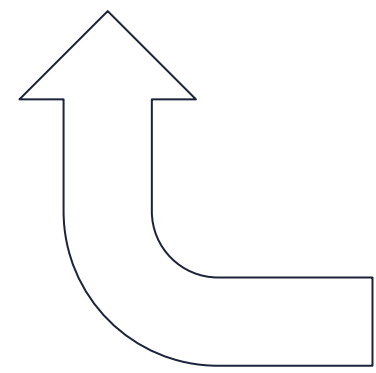


Drupal8-Rector proof of concept automates some fixes

```
@@ -103,7 +105,7 @@  
  
    $machine_name = '';  
    if (!empty($featurename) && empty($packages[$featurename])) {  
-        drupal_set_message($this->t('Feature @name does not exist.', ['@name' => $featurename]), 'error');  
+        $this->messenger()->addError($this->t('Feature @name does not exist.', ['@name' => $featurename]));  
        return [];  
    }  
    elseif (!empty($featurename)) {  
@@ -178,7 +180,7 @@  
    $config = $this->featuresManager->getConfigCollection();  
    $items = array_filter($form_state->getValue('diff'));  
    if (empty($items)) {  
-        drupal_set_message($this->t('No configuration was selected for import.'), 'warning');  
+        $this->messenger()->addWarning($this->t('No configuration was selected for import.'));  
        return;  
    }  
    foreach ($items as $config_name) {  
@@ -192,7 +194,7 @@  
        $type = ConfigurationItem::fromConfigStringToConfigType($item['type']);
```

Drupal8-Rector

<https://pronovix.com/blog/drupal-9-automated-deprecated-code-removal-proof-concept>



<http://bit.ly/drupal8-rector>



Should you remove all
deprecated code use
immediately?



Custom code: as fast as feasible



Contributed projects: be
compatible with supported core



[Acquia](#) Drupal 6 and 7 porting and data, Drupal 8 branch

[Consensus Enterprises](#) Maintenance and Drupal 8 data

Project information

Module categories: [Utility](#)



2,416 sites report using this module

41,968 downloads



[Drupal 9](#) is planned to be released June 3, 2020.

See [#3056118: Keep Upgrade Status itself Drupal 9 compatible other than testing code](#)



Stable releases for this project are covered by the [security advisory policy](#).

There are currently no supported stable releases.

Downloads

8.x-1.0-alpha3 released 29 May 2019

Recommended by the project's maintainer.

[tar.gz](#) (29.37 KB) | [zip](#) (53.17 KB)

When do we know all the
deprecated things?



Drupal 8.8 is the last version to
deprecate for Drupal 9



Should I create
9.x-1.x-dev branches
for my projects?



<https://dgo.to/2807145>



core: 8.x

8.x was already not correct for projects supporting only 8.3+, etc. Workarounds existed using system module dependency.

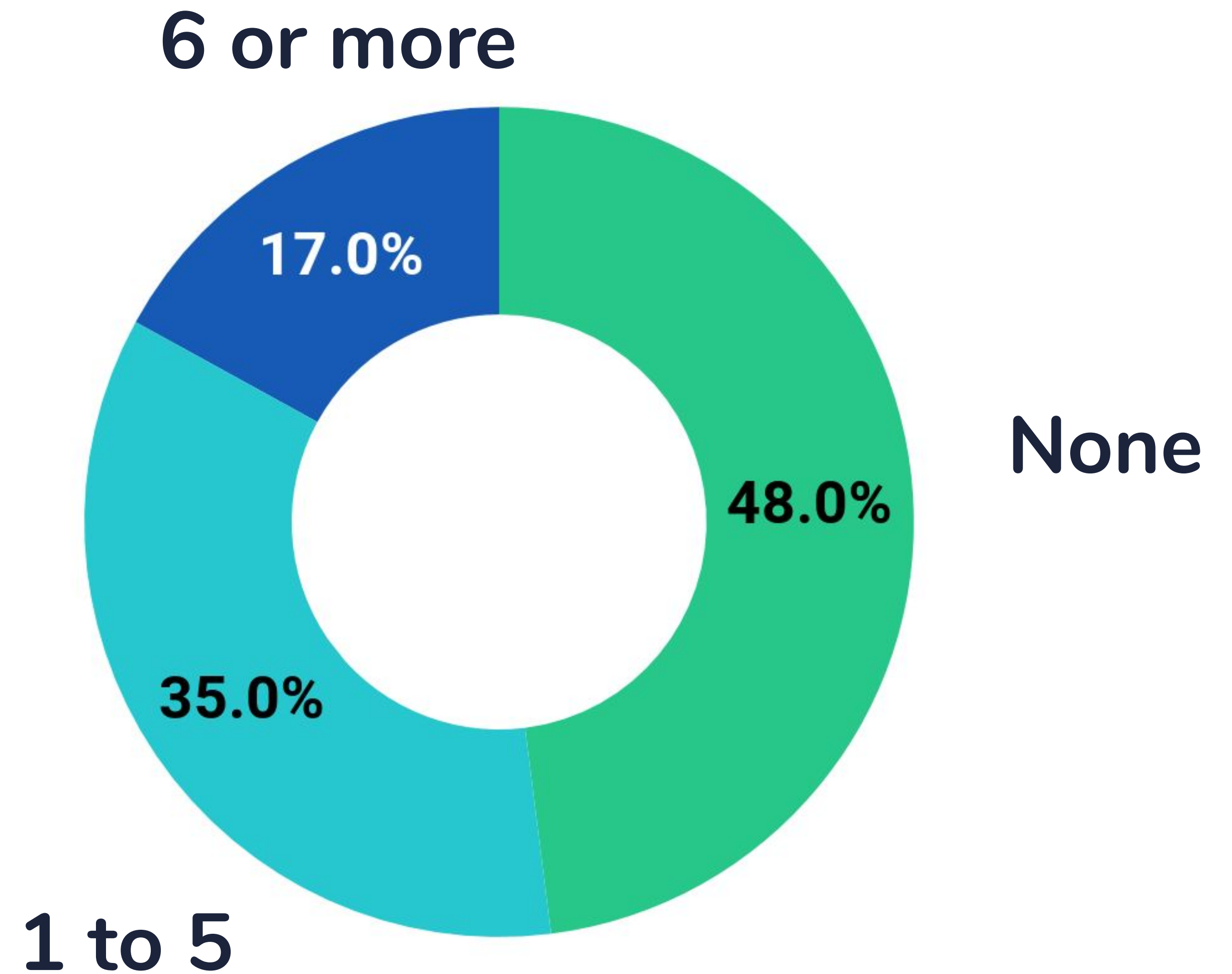
core_version_requirement: ^8.8 || 9.0

New key introduced with Drupal 8.7.7 and Drupal 8.8.0. Uses the composer format. Allows multiple major versions too.

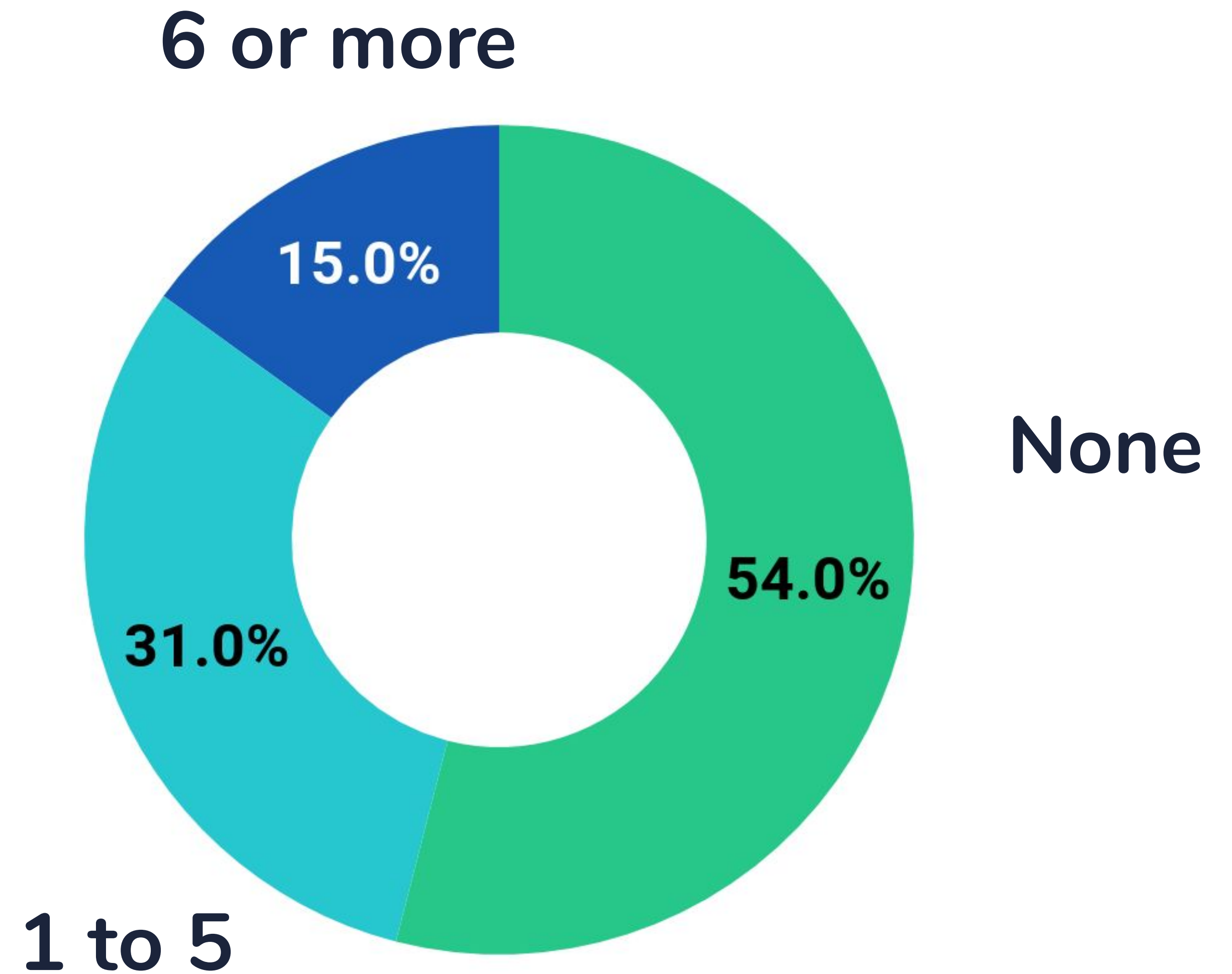
Will contributed modules be
compatible?



Drupal 9
compatibility
issues found in
7000+ modules
in March 2019

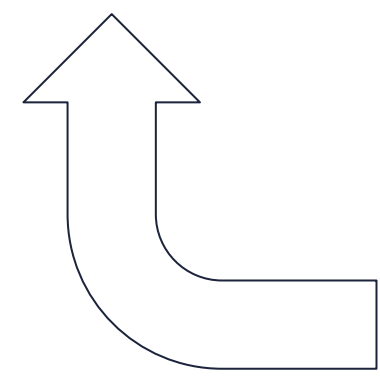


Drupal 9
compatibility
issues found in
contrib modules
end of July 2019



phpstan warnings for supported drupal.org projects

[https://dispatcher.drupalci.org/job/phpstan/
lastBuild/checkstyle/](https://dispatcher.drupalci.org/job/phpstan/lastBuild/checkstyle/)



<http://bit.ly/drupalci-phpstan>

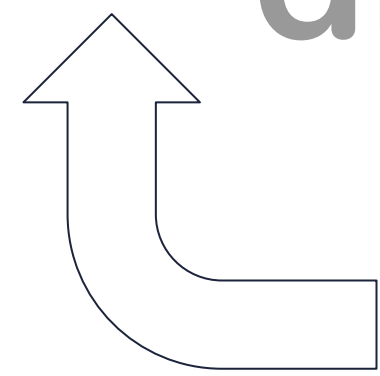


Is Your Module Ready for Drupal 9?

Click Here to Find Out

by Dwayne McDaniel (@McDwayne)

<https://pantheon.io/blog/your-module-ready-drupal-9-click-here-find-out>



<http://bit.ly/d9-module-ready>



What about themes and Twig 2?



See Issue “Provide information on usages of deprecated code in Twig templates”

<https://dgo.to/3054924>



“

“The big deal about Drupal 9 is...
that it should not be a big deal.”

@dries

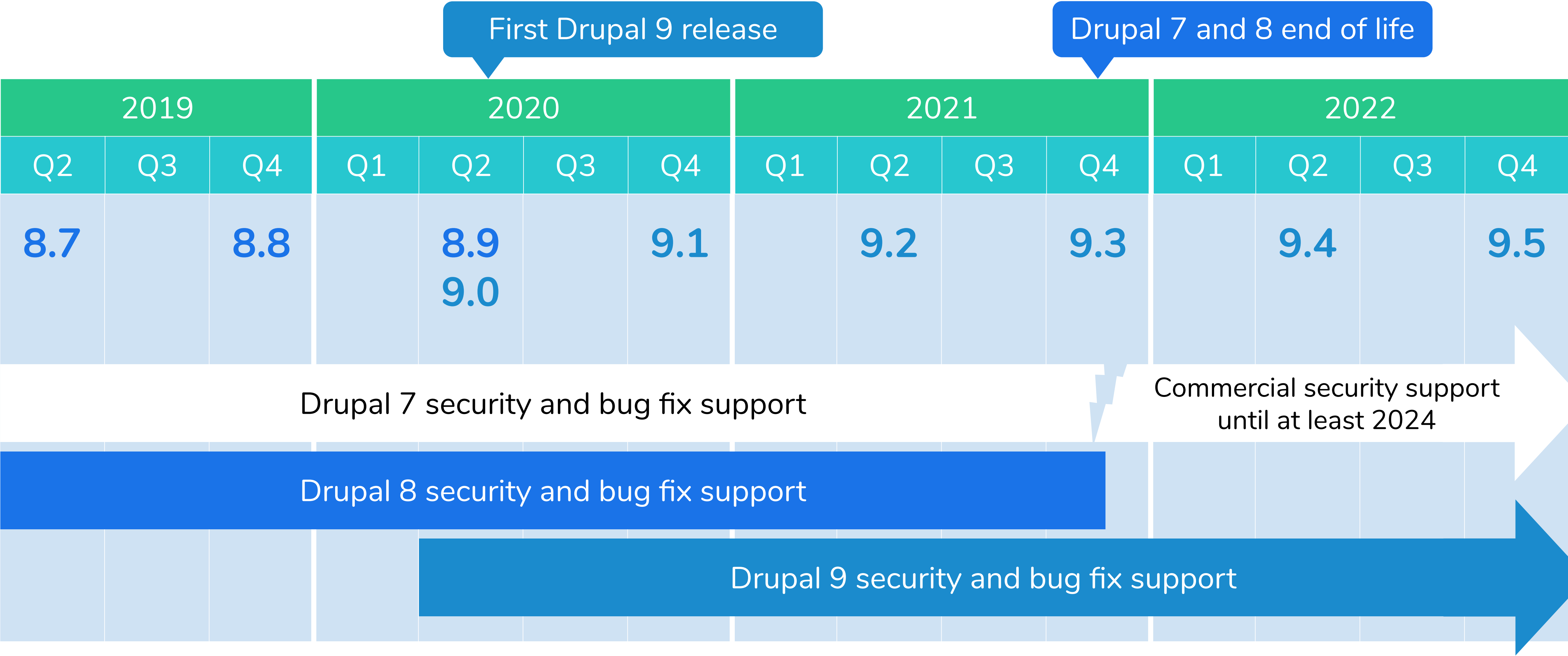
<https://dri.es/plan-for-drupal-9>





I AM ON
DRUPAL 7!

5





Better
media

Config
mgmt

JSON:
API

Content
Moderation

Layout
Builder

Multilingual

BigPipe

Contrib

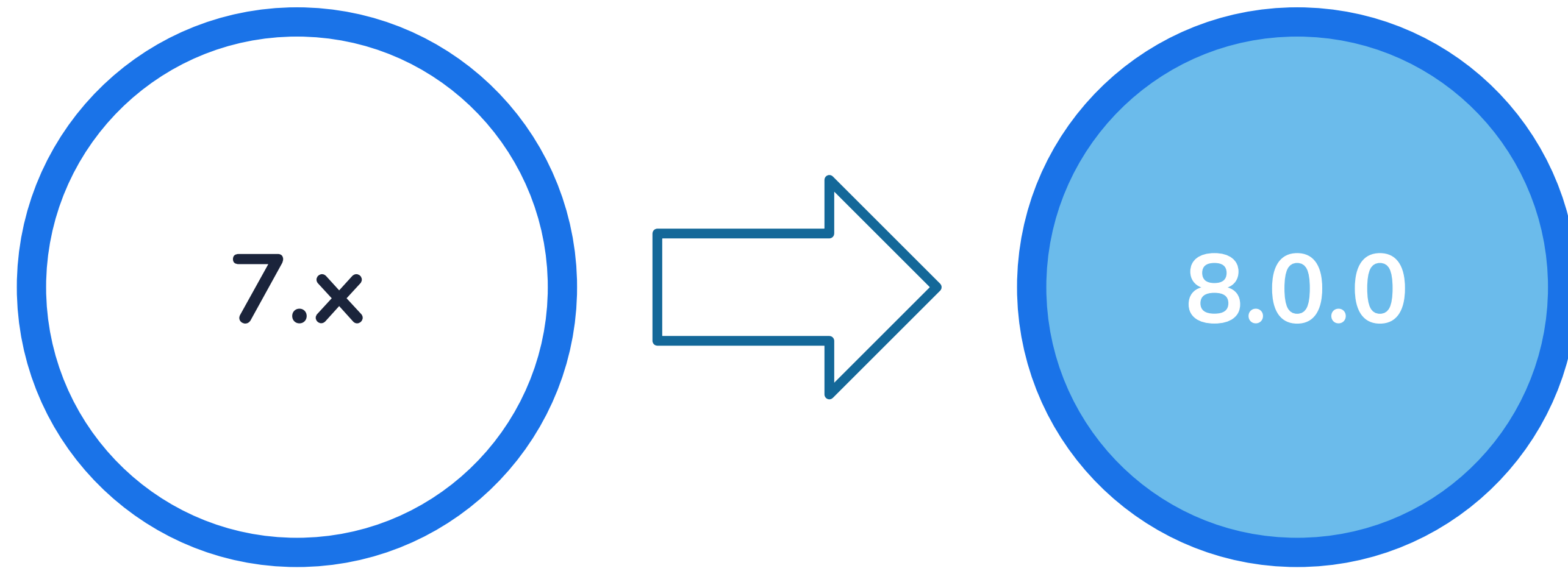
Use Upgrade
Status module
(Drupal 7
version) to
estimate
upgradability.

Custom

Use Drupal
Module
Upgrader to
get a head start
on updating
your custom
code.

Content

Use the core
Migrate
module suite
with contrib
extensions as
needed.



Upgrade Status: drupal.org/project/upgrade_status

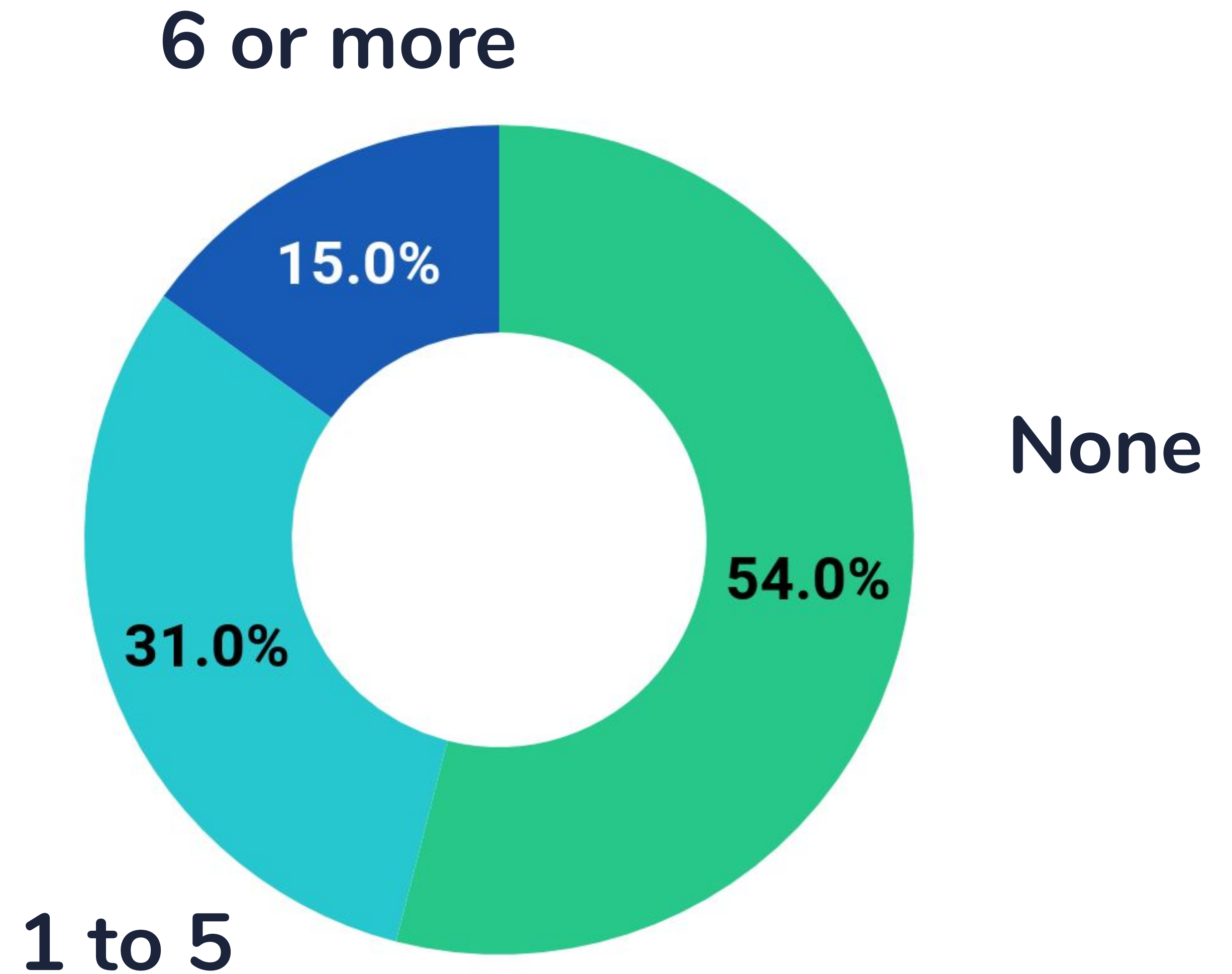
Drupal Module Upgrader:

drupal.org/project/drupalmoduleupgrader

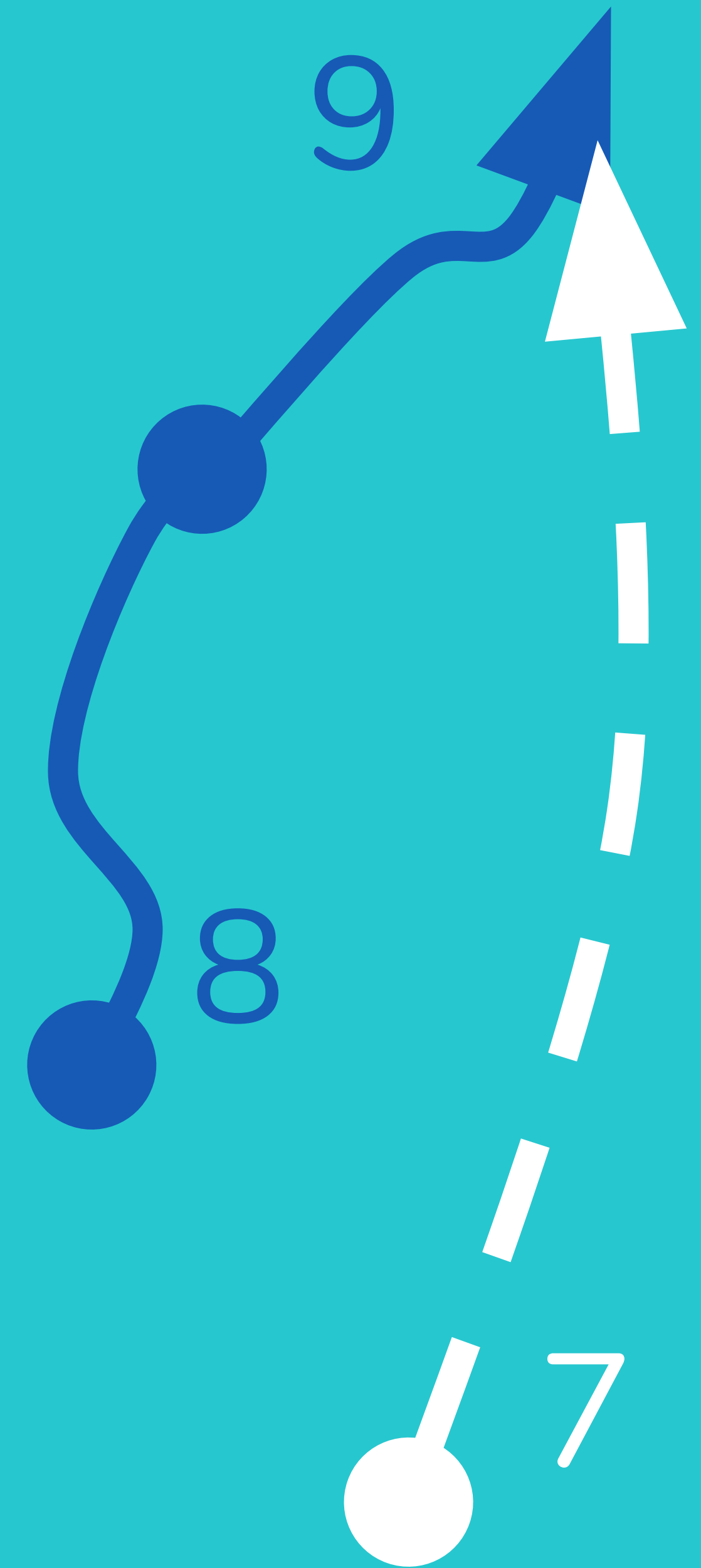
Migrate suite (core)



Drupal 9
compatibility
issues found in
contrib modules
end of July 2019



Skipping Drupal
8 does not
actually bring
benefits



Use `drupal-check` in your
Drupal 7 migration to ensure
Drupal 9 compatibility.



Recap

1. Drupal innovates twice a year and will continue to do so.
2. Drupal 9 is built in Drupal 8 step-by-step.
3. Keep up with Drupal 8 and you will be prepared for an easy way to 9.
4. For Drupal 7 sites there is no reason to wait until 9.
5. Vendors will offer extended Drupal 7 support.



Original Slides: bit.ly/state-of-drupal-9

These slides: bit.ly/amber-state-drupal-9

Documentation: drupal.org/docs/9



CREDITS

Special thanks to all people who made and share these awesome resources for free:

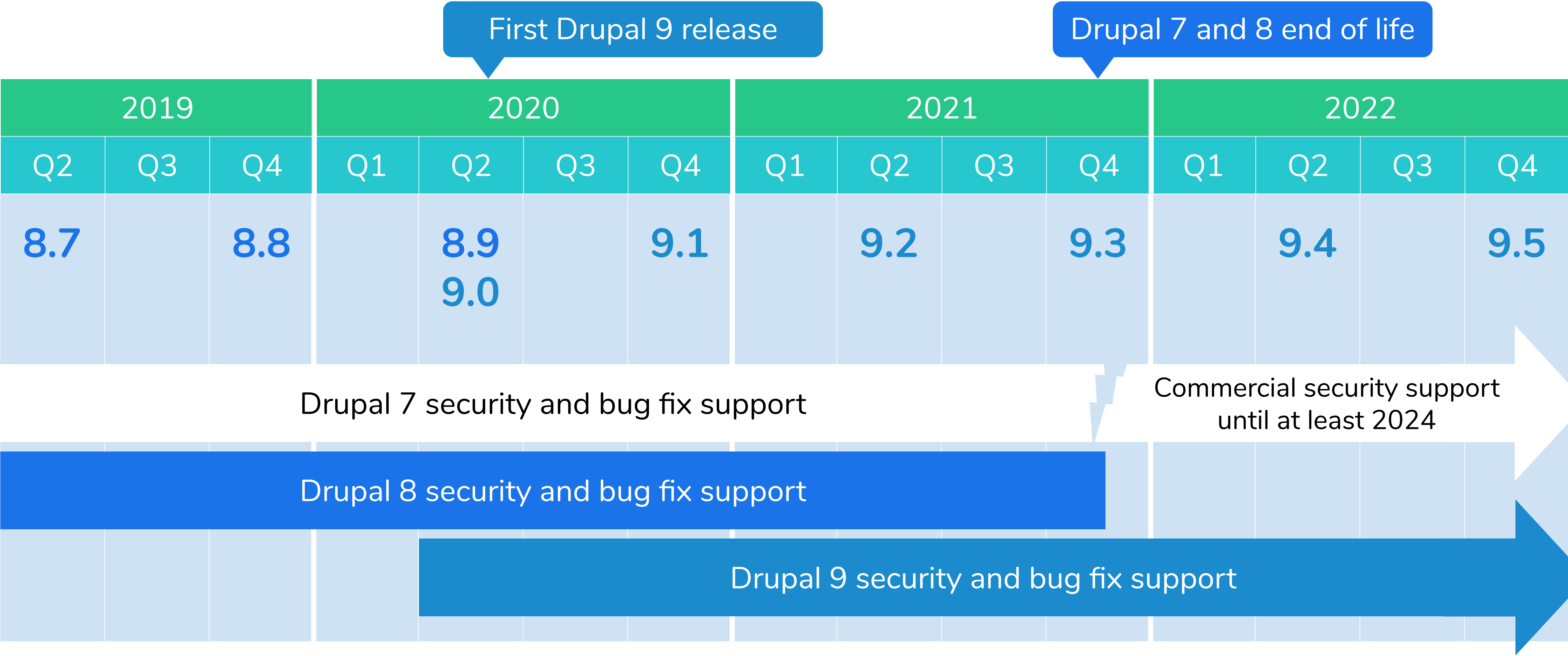
- ☐ Content by @gaborhojtsy, some inspired by @Dries
- ☐ Presentation template designed by [Slidesmash](#)
- ☐ Photographs by [unsplash.com](#) and [pexels.com](#)
- ☐ Vector Icons by [Matthew Skiles](#)



Thanks!

More questions? Tweet @amberhimesmatz







TEMPLATE

PRESENTATION TEMPLATE

Hello!

I Am John Miller

I am here because I love to design presentations.

You can contact me at @username





YOUR HEADLINE

Build better presentations in less time

1

“

“A person who never made a
mistake never tried anything
new”



- ✓ Write here a list of features
- ✓ Here you can write more
- ✓ More about the project

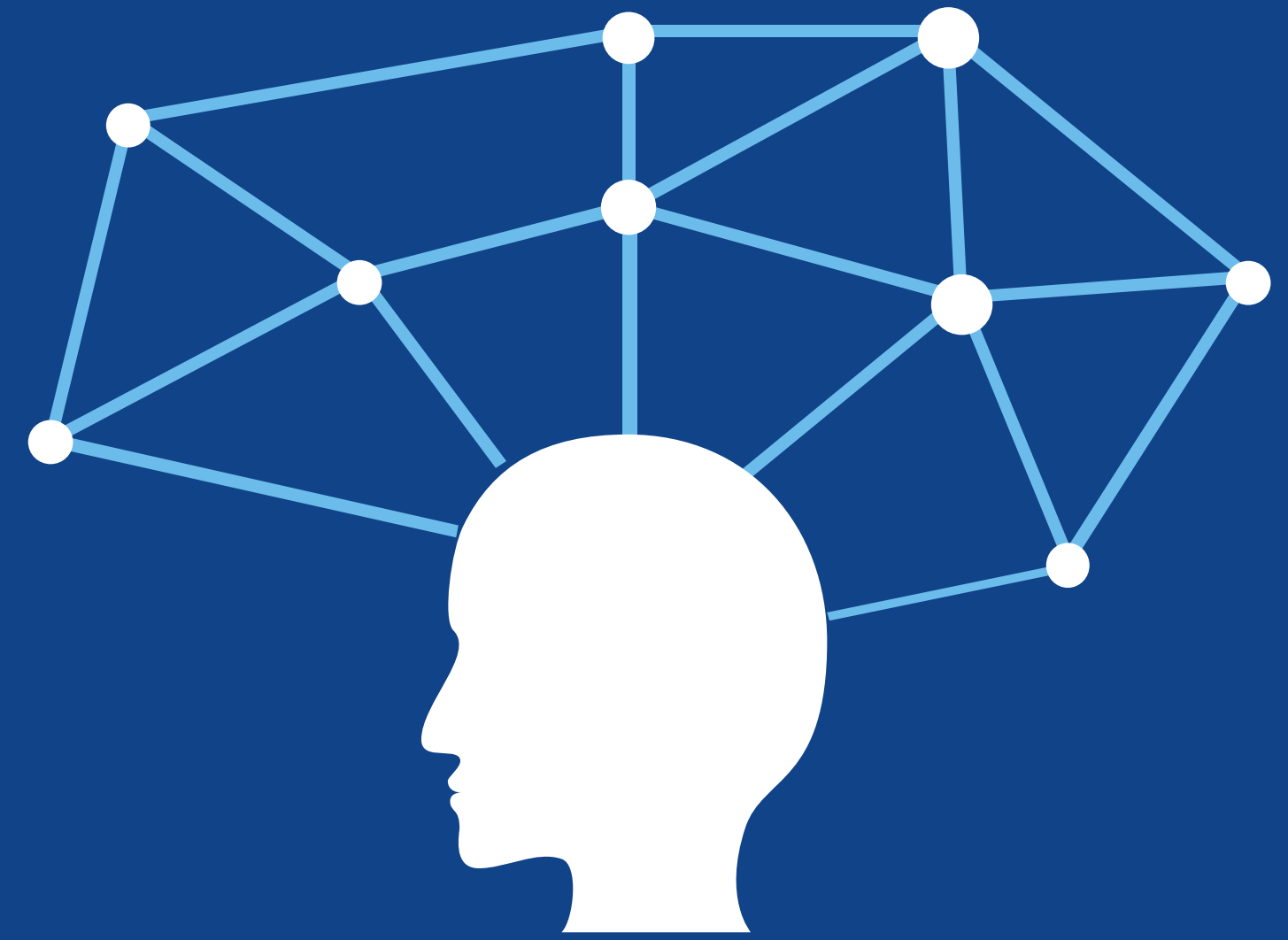
Content itself is what the end-user derives value from also can refer to the information provided.

YOUR SLIDE TITLE



Big Title

The marketing mix is a business tool used in marketing and by marketers, originally can be used



CONTENT IN TWO COLUMNS

Content A

Content itself is what the end-user derives value from also can refer to the information provided through the medium, the way in which the information was presented, as well as the added features included in the medium in which that information was delivered. The medium, however, provides little to no value to the end-user without the information and experiences that make

Content B

Content itself is what the end-user derives value from also can refer to the information provided through the medium, the way in which the information was presented, as well as the added features included in the medium in which that information was delivered. The medium, however, provides little to no value to the end-user without the information and experiences that make



CONTENT IN TWO COLUMNS

Content A

Content itself is what the end-user derives value from also can refer to the information provided through the medium, the way in which the information was presented, as well as the added features included in the medium in which that information was delivered.

Content B

Content itself is what the end-user derives value from also can refer to the information provided through the medium, the way in which the information was presented, as well as the added features included in the medium in which that information was delivered.

Content C

Content itself is what the end-user derives value from also can refer to the information provided through the medium, the way in which the information was presented, as well as the added features included in the medium in which that information was delivered.



A Picture Is Worth A Thousand Words

Itself is what the end-user derives value from also can refer is what the end-user derives value from also can refer to the information provided through the medium.





Use Big Images
To Show Ideas

USE SHAPE TO EXPLAIN IDEAS



TABLES TO COMPARE DATA

	A	B	C
Content A	100	200	400
Content B	\$67,000	\$56,000	\$78,000
Content C	4500	60000	\$8,000
Content D	34000	\$400	\$600
Content E	\$90	\$800	\$1,000

WORLD MAP



56,790,500

Write here your big numbers



FUNNY FACTS

56,790,500

Revenue from sales

130%

Project Achievements

56,790,500

Users around the world



OUR PROCESS



SOME FEATURES



Content A

Itself is what the end-user
derives value from also can
refer to the information



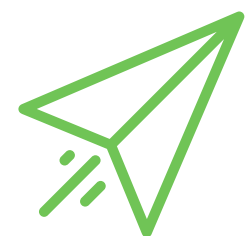
Content B

Itself is what the end-user
derives value from also can
refer to the information



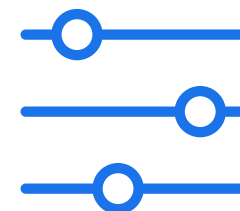
Content B

Itself is what the end-user
derives value from also can
refer to the information



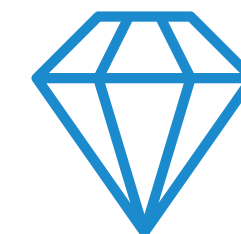
Content C

Itself is what the end-user
derives value from also can
refer to the information



Content D

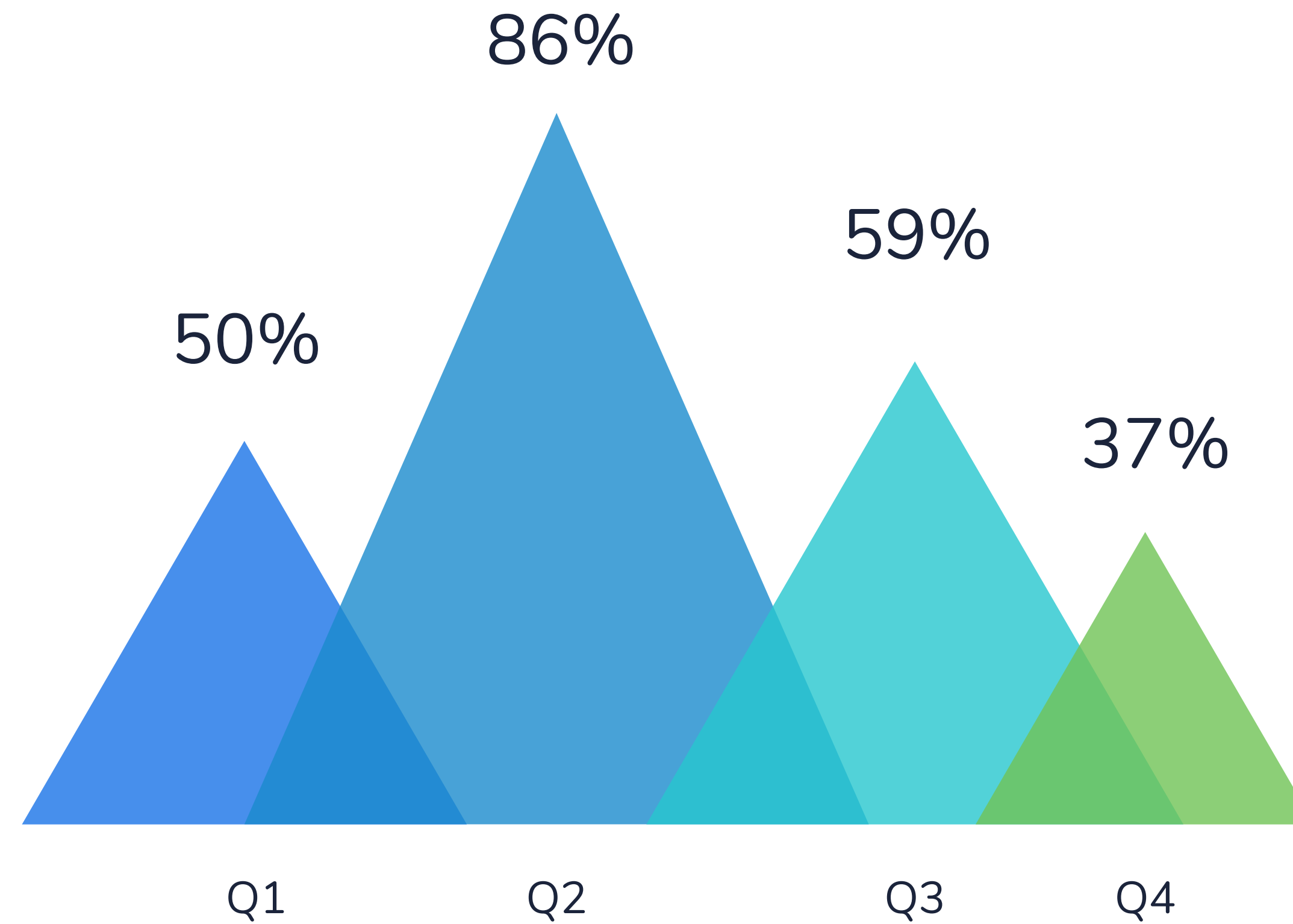
Itself is what the end-user
derives value from also can
refer to the information

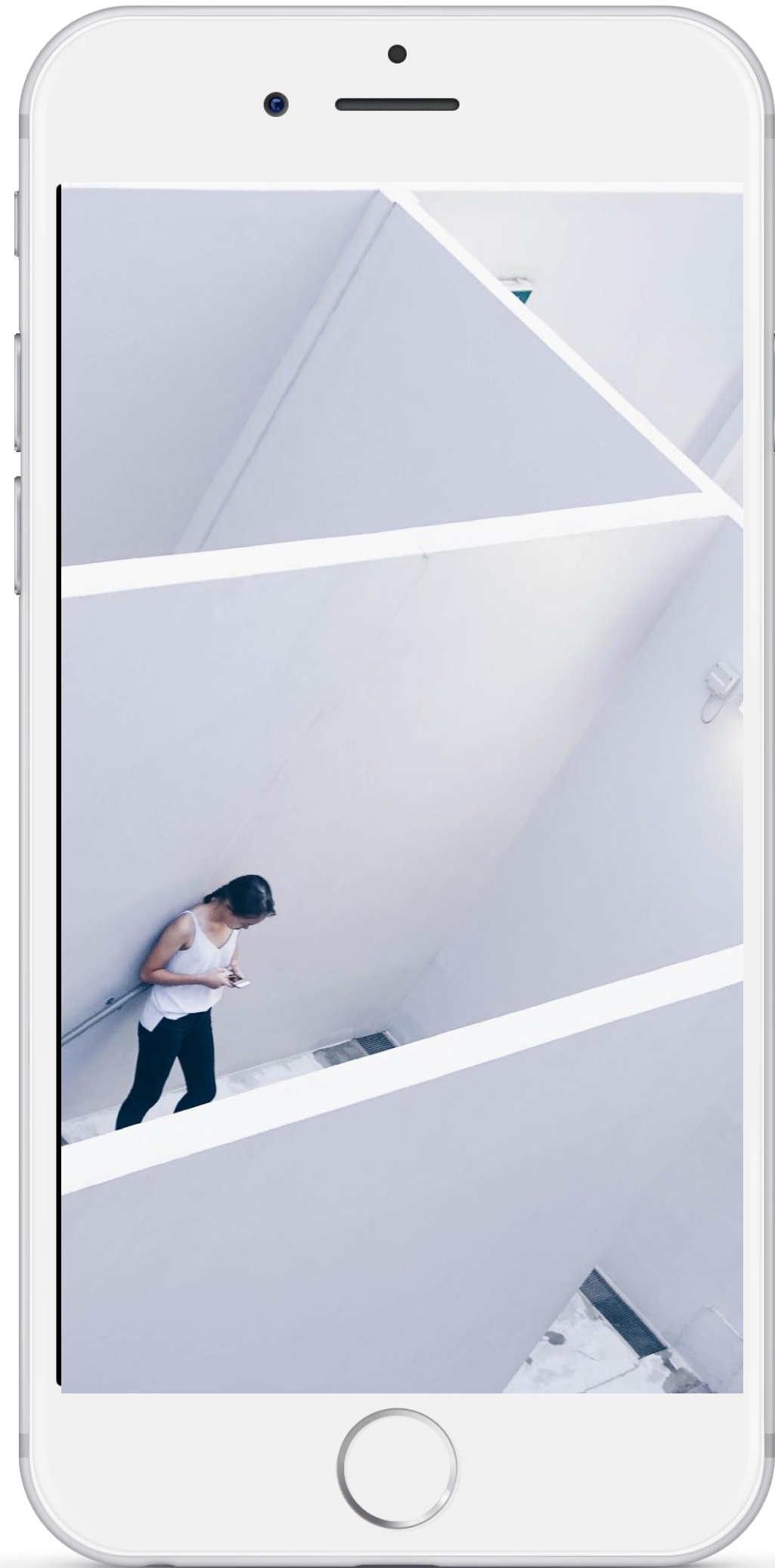


Content D

Itself is what the end-user
derives value from also can
refer to the information

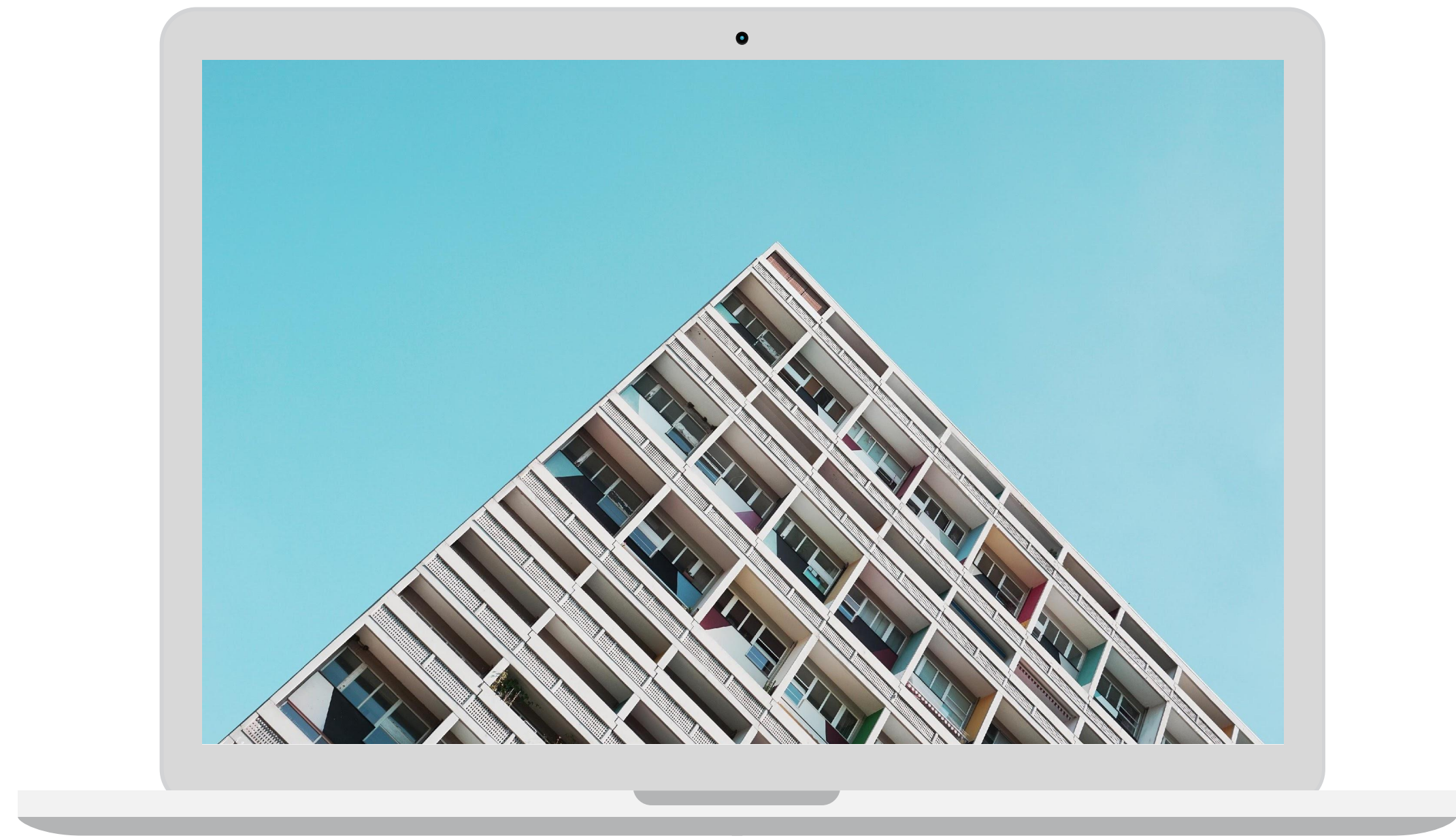
CHARTS TO PRESENT DATA





iPhone App Project

Itself is what the end-user derives value from
also can refer to the information



Laptop Project

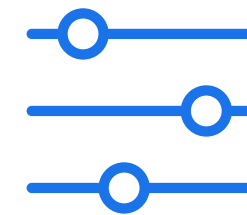
Itself is what the end-user derives value from
also can refer to the information





Content B

Itself is what the end-user
derives value from also can
refer to the information



Content D

Itself is what the end-user
derives value from also can
refer to the information





Thanks!

Any questions?

You can find me at: @username email@domain.com

CREDITS

Special thanks to all people who made and share these awesome resources for free:

- ☐ Presentation template designed by [Slidesmash](#)
- ☐ Photographs by [unsplash.com](#) and [pexels.com](#)
- ☐ Vector Icons by [Matthew Skiles](#)



Presentation Design

This presentation uses the following typographies and colors:

Free Fonts used:

<https://www.fontsquirrel.com/fonts/nunito>

Colors used

